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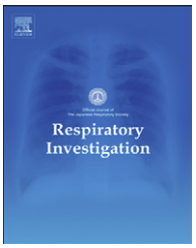

Editorial

Respiratory medicine during the great East Japan earthquake and tsunami

What we as respiratory physicians can learn from Japan's complex 3.11 disasters

On March 11, 2001, the Tohoku area of Japan was hit by a huge M9.0 earthquake. After the earthquake, the Pacific Ocean area was struck by incredibly large tsunamis. This resulted in more than 22,000 victims and the destruction of several hundred thousand houses and buildings. In addition, in Fukushima prefecture, hydrogen explosions at a nuclear reactor resulted in the release of a huge quantity of radioactive substances. The number of evacuees during the peak period of the disaster was more than 400,000, and even today, a large number of people are still living in temporary dwellings or shelters in conditions that affect their physical and psychological well-being. In this unprecedented complex disaster, acute emergency medicine was provided by disaster medical assistance teams (DMAT), radiation emergency medical assistance teams (REMAT), Japan Medical Association teams (JMAT), and volunteer medical staff, not only from Japan, but also from all around the world. It is the quiet and ordered responses and attitude of the victims as well as the supportive attitude of other Japanese citizens that have greatly influenced people worldwide. However, it is also true that there have been and still are a number of problems and issues in our medical system.

During this disaster, we faced a number of expected and unexpected problems and tasks. This was also true for the field of pulmonary medicine. For example, during the superacute phase, "tsunami lung" and chest trauma seemed to be a major problem. During the acute phase, due to the cold spring days, an influenza virus endemic and pneumonia posed significant medical problems in the evacuation shelters. Power failures after the earthquake resulted in severe problems in patients with chronic respiratory failure under home oxygen therapy (HOT) and in those with sleep apnea syndrome under continuous positive pressure ventilation (CPAP). During the sub-acute and chronic phase, there were several problems in the diagnosis, treatment, and management of patients with chronic lung disease such as asthma, chronic obstructive lung disease (COPD), and interstitial pneumonia. Further, there were difficulties in the diagnosis and the treatment of lung cancer.

In this issue of Respiratory Investigation, you can find original manuscripts relating to the management of pulmonary diseases during and after the disaster. Several original manuscripts are now under peer review for future publication. Respiratory Investigation will continue to follow topics on pulmonary medicine relating to the 3.11 disaster. Although the 3.11 disaster was a terribly unfortunate event, we must ensure that we learn something from our experiences. Additionally, we should be prepared to use the knowledge gained from our experiences in the management of patients with pulmonary diseases in the event of a future disaster.

Associate Editor
Mitsuru Munakata
Director of Fukushima Medical University Hospital